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09/820,582	03/29/2001	Phillip Y. Goldman	14531.97	2866

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EXAMINER	
FISH, JAMIESON W	
ART UNIT	**PAPER NUMBER**
2617	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/820,582	GOLDMAN ET AL.	
	Examiner	Art Unit	
	Jamieson W. Fish	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09-26-2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 09-26-2005 have been fully considered but they are not persuasive. The applicant argues Goode does not anticipate "coupling an event with identified information to generate user behavior information for a first home entertainment system, the user behavior information describing how the first home entertainment system is using viewable moving image data and dynamically restructuring the broadcast of a least a selected channel, by at least restructuring the viewable moving image data, and without having to change allocated bandwidth to said selected channel, based on combined user behavior information describing how the viewable moving image data is being used so as to optimize the use of the fixed bandwidth (See Remarks Pg 19 Paragraph 1)." From the cited passages in the Remarks (See footnote 1), the "coupling of an event with identified information to generate user behavior information" language, these limitations are equivalent to the limitations in the claims before the amendment and as such are met by previously cited passages in Goode.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims **1-11**, **13-35** are rejected under 35 U.S.C. 102(e) as being anticipated by Goode (US 6,718,552).

2. Regarding claim **1,** Goode teaches in a system where a broadcast is output across a medium having a fixed bandwidth to individual home entertainment systems, the broadcast included a plurality of channels of viewable moving image data, a method for optimizing the use of the fixed bandwidth by dynamically restructuring the broadcasting of the plurality of channels based on feedback from at least some of the home entertainment systems, the method comprising the steps for: upon the occurrence of an event at a first home entertainment system, initiating usage tracking of how viewable moving image data of a selected channel, form among the plurality of channels, is being used at the first home entertainment system; in response to the event, identifying information related to how the viewable moving image data is being used at the first home entertainment system; coupling the event with the identified information to generate user behavior information for the first home entertainment system, the user behavior information describing how the first entertainment system is using the viewable moving image data (See Col. 3 lines 21-67, Col. 4 lines 1-50); combining the user behavior information from the first home entertainment system with user behavior information from other home entertainment systems that corresponds to the viewable moving image data wherein user behavior information from other home entertainment systems includes events used to initiate usage tracking of the viewable moving image data, the user behavior information from other home entertainment

systems describing how the other home entertainment systems are using the viewable moving image data; (See Col. 3 lines 21-67, Col. 4 lines 1-50); and dynamically restructuring the broadcast of at least the selected channel, by at least restructuring the viewable moving image data and without having to change allocated bandwidth to said selected channel based on the combined user behavior information describing how the viewable moving image data is being used so as to optimize the use of the fixed bandwidth (See Col. 3 lines 21-67, Col. 4 lines 1-50).

3. Regarding claim **2,** Goode teaches wherein the combined user behavior information is anonymous such that the identities of the first home entertainment system and the other home entertainment systems are not disclosed (See Col. 2 lines 50-67 The combined user information is represented as a percentages which provides anonymity of viewers).

4. Regarding claim **3,** Goode teaches wherein said step for dynamically restructuring a broadcast is performed automatically (See Col. 3 lines 21-67, Col. 4 lines 1-50 Restructuring is performed automatically to user viewer statistics).

5. Regarding claim **4,** Goode teaches wherein said step for dynamically restructuring comprises at least one of: modifying bandwidth of the broadcast; changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; interrupting the broadcast by allocating no bandwidth to the channel so as to entirely shut off the channel; redistributing the channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and reserving a guaranteed

amount of bandwidth for the broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50 Moving a set of programs to a channel slot having a predefined bandwidth guarantees an amount of bandwidth for the program channels). The USPTO considers the applicants "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

6. Regarding claim **5,** Goode teaches the method further comprising the step for transmitting the user behavior information as feedback across a back channel from the first home entertainment system to a signal source, wherein the viewing behavior information is transmitted in one of real time (See Col. 4 lines 12-32, Col. 5 lines 36-42) and a deferred basis with respect to the broadcast of the channel. The USPTO considers the applicants "in one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

7. Regarding claim **6,** Goode teaches wherein a statistical analysis is performed at the signal source to determine when a statistically significant number of home entertainment systems have transmitted viewing behavior information (See Col. 3 lines 21-67, Col. 4 lines 1-50 Channel restructuring is based on the percentage of users watching tuned to a channel slot).

8. Regarding claim **7,** Goode teaches the method further comprising the step for transmitting the user behavior information as feedback across a back channel from the first home entertainment system to a clearinghouse system (See Fig. 2, SCM 212, Col. 5 lines 28-46 User information goes to SCM which is a clearinghouse system), wherein the viewing information is transmitted in at least one of (i) real time with respect to the

broadcast of the channel (See Col. 4 lines 12-32) and (ii) on a deferred basis with respect to the broadcast of the channel. The USPTO considers the applicants "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

9. Regarding claim **8,** Goode teaches wherein the clearinghouse system performs said step for combining (See Col. 5 lines 28-57 SCM collects information from various user stations).

10. Regarding claim **9,** Goode teaches wherein a statistical analysis is performed at the clearinghouse system to determine when a statistically significant number of home entertainment systems have transmitted user behavior information (See Col. 5 lines 28-46 SCM manages information this would include statistical analysis).

11. Regarding claim **10,** Goode teaches wherein the clearinghouse system processes the combined user behavior information and forwards the results to a signal source (See Col. 5 lines 39-43).

12. Regarding claim **11**, Goode teaches wherein the processing performed at the clearinghouse system comprises associating the combined user behavior information with data from a data source (See Col. 5 lines 28-46 Viewing behavior is associated with programs).

13. Regarding claim **13,** Goode teaches wherein the processing performed at the clearinghouse system comprises generating a profile of at least one of the home entertainment systems and the users (See Col. 5 lines 28-46).

14. Regarding claim **14,** Goode teaches wherein the profile includes the programs of the broadcast to which the home entertainment systems are more frequently tuned compared to other programs of the broadcast (See Col. 5 lines 28-46).

15. Regarding claim **15,** Goode teaches the method further comprising allocating increased bandwidth to the programs more frequently tuned (See Col. 3 lines 6-15, Col. 4 lines 12-50 Program sets more frequently tuned are assigned broadcast channel slots which require more bandwidth than narrowcast channel slots).

16. Regarding claim **16,** Goode teaches wherein the bandwidth is increased at an instant in time prior to the airing of the programs more frequently tuned (See Col. 6 lines 46-53).

17. Regarding claim **17,** Goode teaches a method further comprising allocating increased bandwidth to channels of the broadcast to which the home entertainment systems are more frequently tuned (See Col. 3 lines 6-15, Col. 4 lines 12-50).

18. Regarding claim **18,** Goode teaches in a system where a broadcast is output across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems, the broadcast including a plurality of channels of viewable moving image data, a method for restructuring the broadcast based on feedback transmitted from the one or more home entertainment systems across one or more potentially unreliable back channels to a clearinghouse system, the method comprising the acts of: receiving at the clearinghouse system user behavior information across a first communication link from a first home entertainment system, wherein the user behavior information includes an event used to initiate usage tracking of viewable

moving image data of a selected channel, from among the plurality of channels, at the first home entertainment system coupled to related information identifying how the first home entertainment system is using the viewable moving image data the user behavior information from the first home entertainment system describing how the first home entertainment system is using the viewable moving image data (See Fig. 2, SCM 212, Col. 5 lines 28-46, See Col. 3 lines 21-67, Col. 4 lines 1-50); receiving at the clearinghouse system other user behavior information across other communication links from other home entertainment systems, wherein user behavior information from other home entertainment systems includes events used to initiate usage tracking of the viewable moving image data at the other home entertainment systems coupled to corresponding related information identifying how the other home entertainment systems are using the selected channel the user behavior information from the other home entertainment systems describing how the other home entertainment systems are using the viewable moving image data (See Fig. 2, SCM 212, Col. 5 lines 28-46, See Col. 3 lines 21-67, Col. 4 lines 1-50); combining at the clearinghouse system the viewing behavior information from the first home entertainment system with the other viewing behavior information from the other home entertainment systems to describe how the viewable moving image data is being used in the system (See Fig. 2, SCM 212, Col. 5 lines 28-46, See Col. 3 lines 21-67, Col. 4 lines 1-50); and automatically restructuring the broadcast of at least the selected channel by at least restructuring the viewable moving image data, and without having to change allocated bandwidth to said

selected channel, based on the combined viewing behavior information (See Col. 3 lines 21-67, Col. 4 lines 1-50 Restructuring is performed automatically to user).

19. Regarding claim **19,** Goode teaches wherein the first communication link and the other communication links are each back channels (See Col. 4 lines 2-10).

20. Regarding claim **20,** Goode teaches a method further comprising the act of statistically determining at the clearinghouse system the reliability of the combined user behavior information, wherein said act of automatically restructuring a broadcast is based on the statistical determination performed at the clearinghouse system (See Col. 3 lines 21-67, Col. 4 lines 1-50 Channel restructuring is based on the percentage of users watching tuned to a channel slot).

21. Regarding claim **21,** Goode teaches wherein the statistical determination performed at the clearinghouse system comprises determining when a statistically significant amount of viewing behavior information has been received to cause the broadcast to be automatically restructured (See Col. 3 lines 21-67, Col. 4 lines 1-50 Channel restructuring is based on the percentage of users watching tuned to a channel slot).

22. Regarding claim **22,** Goode teaches wherein said act of automatically restructuring a broadcast comprises at least one of: modifying bandwidth of the broadcast; changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; interrupting the broadcast by allocating no bandwidth to the channel so as to entirely shut off the channel; redistributing the channel from a first transponder of a satellite television

system to a second transponder of the satellite television system; and reserving a guaranteed amount of bandwidth for the broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50 Moving a set of programs to a channel slot having a predefined bandwidth guarantees an amount of bandwidth for the program channels). The USPTO considers the applicants "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

23. Regarding claim **23,** Goode teaches wherein said act of automatically restructuring a broadcast comprises allocating varying amounts of bandwidth of an MPEG data stream to the channel (See Col. 4 lines 46-50, Col. 6 lines 10-53 Various MPEG program sets are assigned to channel slots. Since different MPEG program sets having varying amounts of bandwidth, this is varying amounts of bandwidth of an MPEG data stream).

24. Regarding claim **24,** Goode teaches in a system where a broadcast is provided from a signal source across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems, the broadcast including a plurality of channels having viewable moving image data, a method for optimizing the bandwidth by restructuring the broadcasting of one or more channels within the broadcast based on feedback transmitted from the one or more home entertainment systems to the signal source across one or more back channels, the method comprising the acts of: transmitting a broadcast from a signal source to one or more home entertainment systems (See Col. 3 lines 21-67, Col. 4 lines 1-50); receiving at the signal source user behavior information across a first back channel from a first home entertainment

system, wherein the user behavior information from the first home entertainment system includes an event used to initiate usage tracking of a viewable moving image data of a selected channel, from among the plurality of channels of viewable moving image data, at the first home entertainment system coupled to related information identifying how the first home entertainment system is using the of viewable moving image data, and wherein the first home entertainment system is one of the one or more home entertainment systems (See Col. 3 lines 21-67, Col. 4 lines 1-50); receiving at the signal source other user behavior information across other back channels from other home entertainment systems, wherein user behavior information from other home entertainment systems includes events used to initiate usage tracking of the viewable moving image data at the other home entertainment systems are using the viewable moving image data, and wherein the other home entertainment systems are of the one or more home entertainment systems (See Col. 3 lines 21-67, Col. 4 lines 1-50); combining the user behavior information from the first home entertainment system with the other user behavior information from the other home entertainment systems to describe how the viewable moving image data is being used in the system (See Col. 3 lines 21-67, Col. 4 lines 1-50); and automatically restructuring a broadcast of the selected channel, by at least restructuring the viewable moving image data, and without having to change the allocated bandwidth to said selected channel based on the combined user behavior information (See Col. 3 lines 21-67, Col. 4 lines 1-50 Channel slots are used to transmit different sets of programming based on the number of viewers currently tuned to the channel slot).

25. Regarding claim **25**, Goode teaches wherein the user behavior information is received in real time across the first communication link with respect to a program broadcast on the selected channel (See Col. 3 lines 21-67, Col. 4 lines 1-50 Viewership statistics are calculated as program is being broadcast).

26. Regarding claim **26,** Goode teaches wherein the user behavior information is received on a deferred basis across the first communication link with respect to a program broadcast on the selected channel (See Col. 3 lines 21-67, Col. 4 lines 1-50 There is an inherent delay between when viewing behavior is transmitted from when it is received).

27. Regarding claims **27-28,** claims 27-28 relate to a computer program product comprising a computer readable medium carrying computer program code means utilized to implementing the methods of claims **18-19**, respectively. Thus, claims **27-28** are evaluated and rejected with respect to claims **18-19**.

28. Regarding claim **29,** Goode teaches wherein the user behavior information is received in real time with respect to a program broadcast on the selected channel (See Col. 3 lines 21-67, Col. 4 lines 1-65 Viewership statistics are calculated as program is being broadcast).

29. Regarding claim **30,** Goode teaches wherein the user behavior information is received on a deferred basis with respect to a program broadcast on the selected channel (See Col. 3 lines 21-67, Col. 4 lines 1-50 There is an inherent delay between when viewing behavior is transmitted from when it is received).

30. Regarding claim **31,** Goode teaches in a system that provides a broadcast across a medium having a fixed bandwidth to individual home entertainment system, the broadcast including one or more channels of viewable moving image data, a method for improving the broadcast based at least in part by feedback received from one or more of the home entertainment systems, the method comprising the acts of: receiving a broadcast at a local signal source, wherein the broadcast is sent from a central signal source (See Col. 5 lines 5-27 Headend (local signal source) receives video from video source (central source)); transmitting the broadcast to one or more home entertainment systems (See Col. 3 lines 21-67, Col. 4 lines 1-50); receiving at the local signal source user behavior information form at least one of the one or more home entertainment systems, wherein the user behavior information is received across a back channel, the user behavior information including events used to initiate usage tracking of viewable moving image data of a selected channel, from among the one or more channels, at the at least one home entertainment system coupled to related information identifying how the at least one home entertainment system is using viewable moving image data (See Col. 3 lines 21-67, Col. 4 lines 1-50); combining the user behavior information to describe how the selected channel is being used in the system; and transmitting a dynamically restructured broadcast to the one or more home entertainment systems, wherein the restructured broadcast is restructured by at least the restructuring the viewable moving image data, without having to change allocated bandwidth to said selected channel, and is restructured based at least in part on the description of how selected channel is being used in the system (See Col. 3 lines 21-67, Col. 4 lines 1-50

Channel slots are used to transmit different sets of programming based on the number of viewers currently tuned to the channel slot).

31. Regarding claim **32,** Goode teaches wherein the broadcast is dynamically restructured at the local signal source (See Col. 4 lines 28-32).

32. Regarding claim **33,** Goode teaches wherein the dynamic restructuring of the broadcast comprises at least one of: modifying bandwidth of the broadcast; changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; redistributing a channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and reserving a guaranteed amount of bandwidth for the broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50 Moving a set of programs to a channel slot having a predefined bandwidth guarantees an amount of bandwidth for the program channels). The USPTO considers the applicants "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

33. Regarding claim **34,** Goode teaches the method further comprising the acts of: transmitting the user behavior information to one of the central signal source and a clearinghouse system (See Fig. 2, SCM 212, Col. 5 lines 28-46 User information goes to SCM which is a clearinghouse system); wherein said act of transmitting the user behavior information is performed before said act of transmitting a dynamically restructured broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50); and receiving the dynamically restructured broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50).

34. Regarding claim **35,** Goode teaches wherein the broadcast was dynamically restructured by at least one of: a modification in bandwidth allocation; a change in the modulation of the broadcast; a change in an encoding scheme of the broadcast; a modification in a parameter of the encoding scheme of the broadcast; a redistribution of a channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and a reservation of a guaranteed amount of bandwidth for the broadcast (See Col. 3 lines 21-67, Col. 4 lines 1-50 Moving a set of programs to a channel slot having a predefined bandwidth guarantees an amount of bandwidth for the program channels). The USPTO considers the applicants "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Claim Rejections - 35 USC § 103

35. Claim **12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Goode.

Regarding claim **12,** Goode fails to disclose wherein the data source comprises an electronic programming guide that provides data as to at least one of a program and an advertisement. However, Goode does teach where MPEG-2 System information is used in his invention (See Col. 6 lines 14-16). Using system information is one way to assemble an electronic program guide. Official notice is taken that electronic programming guides that provide data as to at least one of program and an advertisement are notoriously well known in the art as an effective way to organize broadcast information. Thus, it would have been obvious at the time the invention was

made to modify Goode to have the data source comprise an electronic programming guide that provided data as to at least one of a program and an advertisement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 571-272-7307. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 12-21-2005

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